

# TIGER TEAMS AND APPLICATIONS TO SOCIETY



## Bryan Duncan and Jason West – Demonstration of Efficacy of Environmental Regulations in the Eastern US

### THE LEADERS

Bryan Duncan and Jason West lead the project, *Demonstration of Efficacy of Environmental Regulations in the Eastern US*. Bryan Duncan is a Research Scientist at NASA Goddard Space Flight Center and specializes in air quality and tropospheric trace gas composition. Jason West is a professor in the Department of Environmental Sciences and Engineering at the UNC Gillings School of Global Public Health and researches air pollution in relation to science policy. Their combined expertise allows them to lead this Tiger Team, aiming to prove that air quality is improving and that regulatory measures are effective at benefiting human health.

### THE INSPIRATION

Bryan Duncan says, “the average person does not understand that air quality is improving.” From the implementation of the Clean Air Act in 1970 to present day, air quality has increased dramatically. Since 1980, there has been a 85% decrease in carbon monoxide levels,, and 87% decrease in sulfur dioxide levels. However, air quality managers complain that most people, including the general public and policy-makers do not recognize the vast improvement in air quality. Hence, Tiger Team leaders want to prove with scientific data that air quality and, subsequently, human health, have improved since the Clean Air Act and that regulatory measures are effective. Jason West said that he wanted to contribute significantly and “get good ideas together”.

### THE PROCESS

Tiger Teams are tasked with finding solutions to pressing health and air quality issues within one year. With such an ambitious goal and short timeline, significant effort is required to obtain results. Bryan Duncan and Jason West admit that coordination between five and eight people and responses to stakeholders can be challenging. However, the urgency of their work inspired their continued leadership. They want to prove how many lives have been saved by these regulations. Brainstorming sessions provide innovative strategies to reach solutions as well as an opportunity to “get people who are not used to talking to each other together”.

### HIGHLIGHTS

Recognized national support serves as an impressive moment in any career. One of Bryan Duncan’s past ACAST projects was highlighted in a video by President Obama. The video focused on the Aura satellite data that shows that NO<sub>2</sub> levels have decreased in the US. This exciting event demonstrated the importance of scientific communication to the public. Bryan Duncan says that NASA satellite data can be disseminated to the public through clear images. Jason West is excited that he was chosen to be a HAQAST Team Leader. As his first year participating in Tiger Teams, he is passionate about his Tiger Team leadership.

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